R13. Pulling it All Together

UNDERSTANDING ITS/CVO TECHNOLOGY APPLICATIONS

Reference Manual

MODULE 13 -
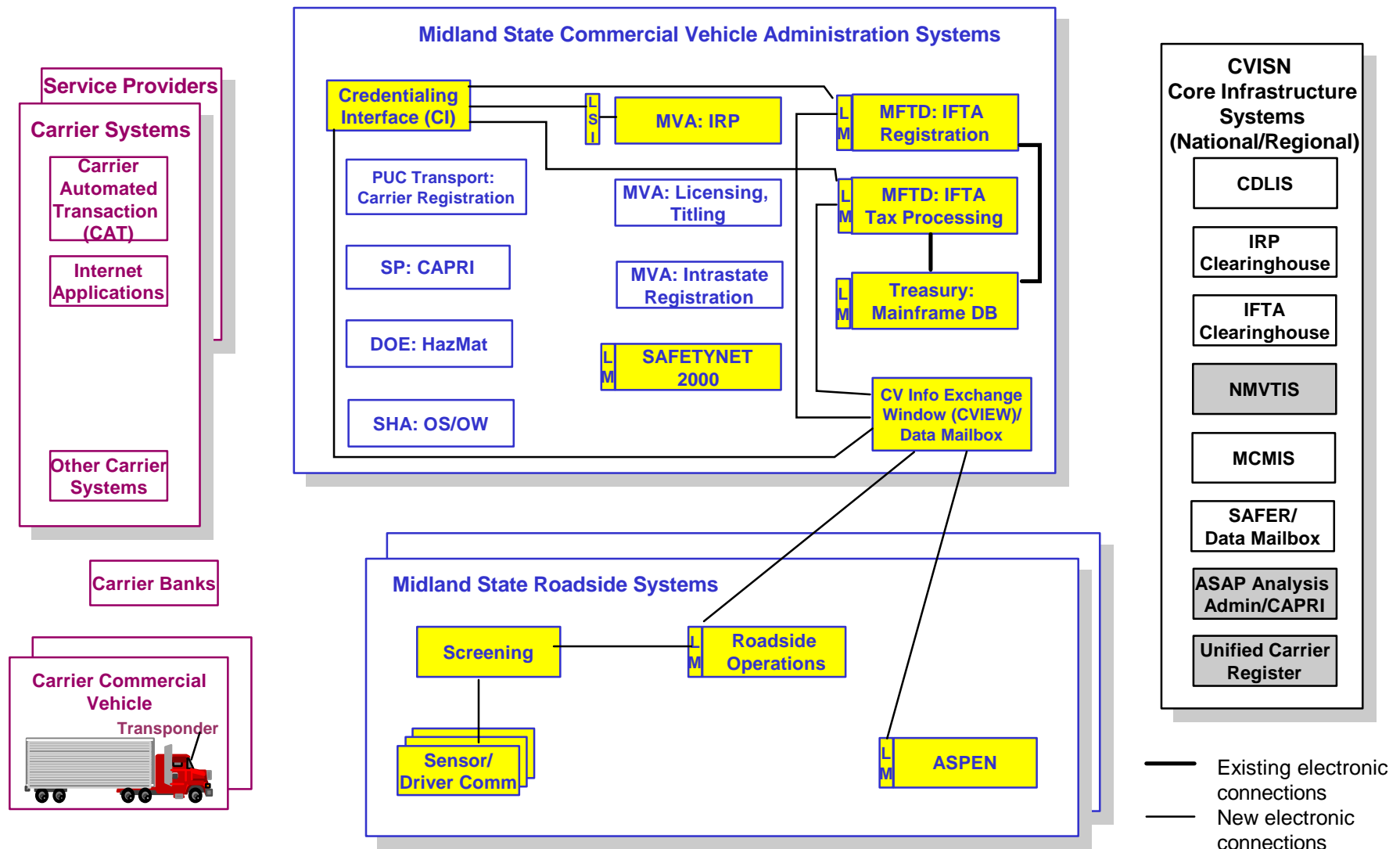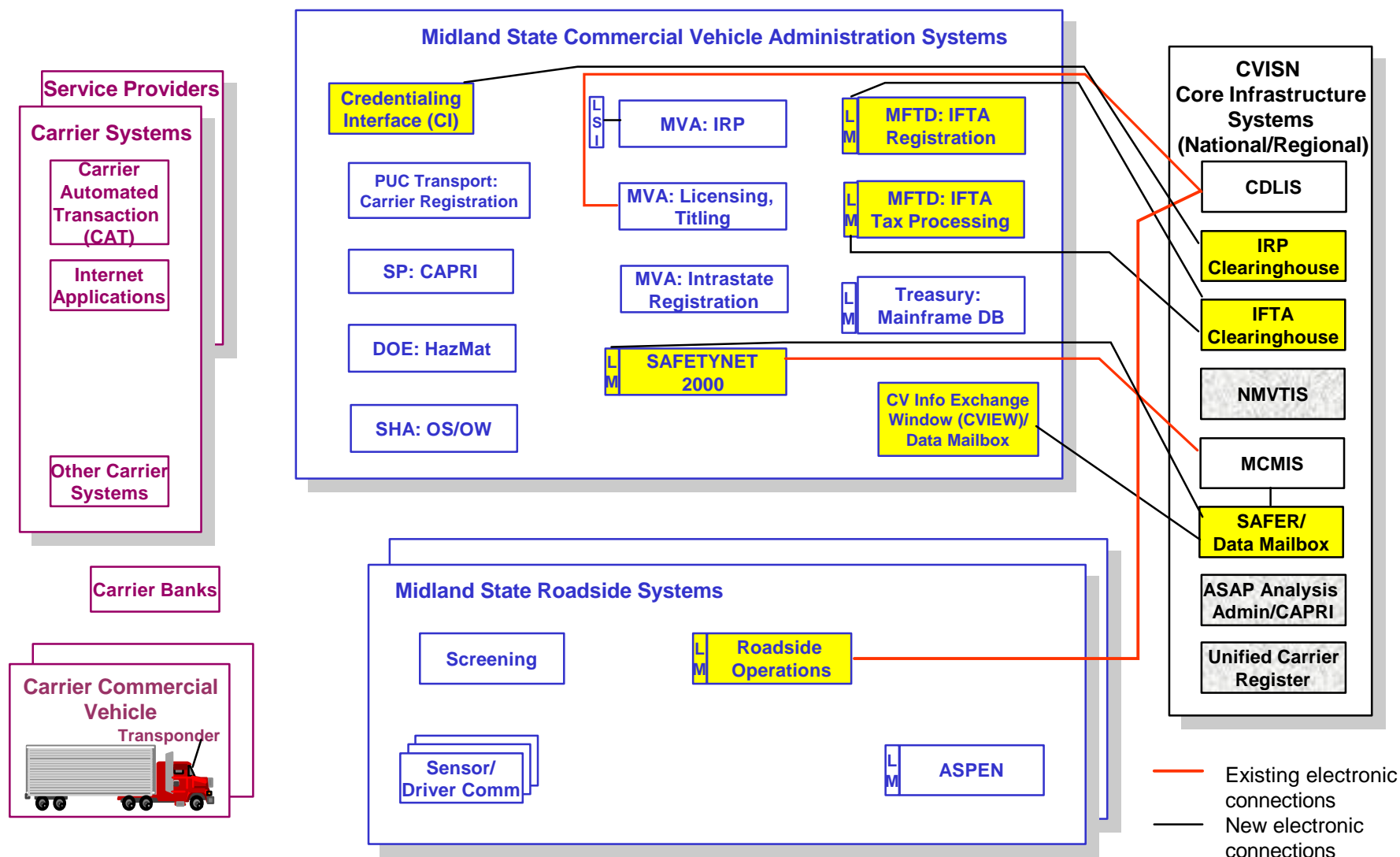# PULLING IT ALL TOGETHER

Network Upgrades

- LAN - connections within Midland
- WAN - connections between carriers and Midland, and between Midland and the CVISN Core Infrastructure systems

- Wireless - makes sense for roadside to vehicle (DSRC) and for roadside to deskside (CVIEW to Roadside Operations, CVIEW to ASPEN)
- Wireline - makes sense for fixed site to fixed site connections

Proposed Midland Design: Interfaces within the State

Midland State Commercial Vehicle Administration Systems

- Credentialing Interface (CI)
- L S I
- MVA: IRP
- L M — MFTD: IFTA Registration
- PUC Transport: Carrier Registration
- MVA: Licensing, Titling
- L M — MFTD: IFTA Tax Processing
- SP: CAPRI
- MVA: Intrastate Registration
- L M — Treasury: Mainframe DB
- DOE: HazMat
- L M — SAFETYNET 2000
- SHA: OS/OW
- CV Info Exchange Window (CVIEW)/ Data Mailbox

Service Providers

Carrier Systems
- Carrier Automated Transaction (CAT)
- Internet Applications
- Other Carrier Systems

Carrier Banks

Carrier Commercial Vehicle
- Transponder

CVISN Core Infrastructure Systems (National/Regional)
- CDLIS
- IRP Clearinghouse
- IFTA Clearinghouse
- NMVTIS
- MCMIS
- SAFER/ Data Mailbox
- ASAP Analysis Admin/CAPRI
- Unified Carrier Register

Midland State Roadside Systems
- Screening
- L M — Roadside Operations
- Sensor/ Driver Comm
- L M — ASPEN

— Existing electronic connections
— New electronic connections

Proposed Midland Design:
State - Core Infrastructure Interfaces

Service Providers

Carrier Systems

Carrier Automated Transaction (CAT)

Internet Applications

Other Carrier Systems

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Midland State Roadside Systems

Screening

L M — Roadside Operations

Sensor/ Driver Comm

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Interface Standards

- **EDI**
  - Inspections - TS 284 CV Safety Reports
  - Electronic Credentialing - TS 286 Commercial Vehicle (CV) Credentials
  - Tax Filing - TS 813 Electronic Filing of Tax Return Data, TS 826 Tax Information Exchange, TS 150 Tax Rates, TS 151 Electronic Filing of Tax Return Data Acknowledgement
  - Snapshots - TS 285 CV Safety & Credentials Information Exchange, TS 864 Text Message
  - Electronic Payment - TS 286 Commercial Vehicle (CV) Credentials, Other TBD
  - All - TS 997 Functional Acknowledgement
- **DSRC**
  - Lower layers - ASTM E17.51
  - Upper layer - IEEE P1455 CV Screening Message Set